Understanding the Marketing Arrangements of Smallholder farmers in the Western Cape Province of South Africa: A case study of Goedverwacht Community

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Abstract:

This case study sought to investigate marketing arrangements of smallholder farmers at Goedverwacht in the West Coast district of the Western Cape. A Social Network Analysis framework was applied to identify the structure of relationships among social entities used by farmers and to evaluate the patterns and implications of these relationships with regards to these marketing arrangements. The networks within the community include the local cooperative, local tourism centre, local shops, the Moravian church, farmer’s association etc and outside the community they include hawkers, input suppliers, supermarkets etc. Results indicate that all of the smallholder farmers in Goedverwacht use mostly social networks within the community to sell their produce. Sale of produce through formal channels like supermarkets is limited due to such factors as lack of transport and low volumes. Nevertheless, the Goedverwacht community benefits from free access to water and government support through provision of farming equipment and seeds. The annual Snoek and Patat festival also serves as the market for the Goedverwacht community. It is thus realized that for farmers to fully exploit social networks, market readiness is important. Collective action must also be encouraged to strengthen farmers’ bargaining power and market positions thereby sustaining market access.

Key words: Social Network Analysis, smallholder farmer, market access, informal market,
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1. Introduction

Smallholder farming in South Africa cannot be understood without reference to the history of the country and past policies. South Africa has a dual agricultural economy, characterized by a well-developed commercial sector and a non-commercial sector, consisting of smallholder farmers and subsistence farmers (Thamaga-Chitja and Morojele, 2014). This duality of farming is the result of the historical marginalization of smallholder farming. Apartheid and past policies, including the Native Land Act of 1913 and 1936, created profound inequalities. These policies gave white large-scale farmers privileged access to productive lands, subsidies and rural infrastructures while black and coloured people were dispossessed and excluded,
prevented from becoming economically independent. Despite land reform policies implemented by the government in 1994, inequalities still exist (Kloppers and Pienaar, 2014).

Smallholder farmers play a major role in ensuring food security, producing up to 80 percent of the food consumed in many developing countries in small plots of arable land and low output (FAO, 2013; Matungul, Lyne & Ortmann, 2001). However, smallholder farmers in the new South Africa are faced with a number of various challenges including limited access to factors of production, credit, market information and markets (Ortmann and King, 2010). It is against this context that South African government and various other stakeholders introduced a number of policies and programmes to promote food security and the commercialization of smallholder farmers. There is a strong sentiment that smallholder sector have a potential of providing food security and employment (Kang’ethe, 2006). These programmes include, land reform, Comprehensive Support Programmes (CASP), MAFISA and food security programmes in provinces.

The South African Government is trying to close the gap between commercial and smaller farmers, especially in the market access framework. Gilimani (2005) states that in the democratic South Africa, it is in agriculture’s interest to show that it wants to bridge gaps to greater involvement by South Africans with programmes to induct smaller farmers into commercial production. The focus is skewed towards the identification of market opportunities and facilitation of access of disadvantaged South African farmers to formal markets.

In South Africa, agriculture plays a major role in poverty alleviation and rural development. In this respect, markets are essential in which they represent an outlet for products and a source of income for producers. The participation in formal markets is necessary to shift into commercial farming and move out of poverty (Jari, 2009). The real problem is no longer production oriented but market oriented. Production is now demand-driven, therefore, market access is an issue and proper marketing channels have to be identified. However, many studies (Mthembu, 2008; Jari, 2009; Baloyi, 2010; Jari and Fraser, 2013) have shown that smallholder farmers are still struggling to market their products and access these formal markets. Smallholder farmers mainly sell to informal markets to ensure the disposal of products and make a low income to meet their basic needs. This situation is not satisfying for farmers, and appears as largely unsustainable and uncertain.
1.1. Research objective

The main objective of the study to investigate the marketing arrangements of smallholder farmers using the Social Analysis Network framework.

1.2. Network Analysis for Samllholder Marketing Arrangements

According to Webster and Morrison (2004) Network analysis focuses in understanding the structure and function of networks which is essential in marketing. Research in number of academic fields has shown that social networks operate on my levels from families up to the level of nations and play a critical role in determining the way problems are solved, organizations are run, and the degree in which individuals succeed in achieving their goals. Network analysis also assist in understanding complex issues such as collaboration, trust, power and choice (Webster and Morrison, 2004).

Social network analysis originate from 1800s written by Émile Durkheim and Ferdinand Tönnies (Jana, Bandyopadhyay & Choudhuri, 2017). Tonnies argued that social groups exist as personal and direct social ties that either link individuals who share values and belief or impersonal, formal and instrumental social links. While Durkheim gave a non-individualistic explanation of social facts arguing that social phenomena arise when interacting individuals constitute a reality that can no longer be accounted for in terms of the properties of individual actors (Jana et al, 2017). He distinguished between a traditional society or “mechanical solidarity” which prevails if individual differences are minimized and modern society or “organic solidarity” that develops out of cooperation between individuals with independent roles (Jana et al, 2017).

Relating to agricultural activities, farmers interact regularly amongst themselves and other stakeholders. They engage for different kinds of needs. It could be getting advice from extension officers or from their counterparts regarding cultivation, obtaining appropriate seeds and plants, getting tools and implements from extension officers. On these bases a farmer can build a social network. The idea that individuals are connected with one another present an opportunity of different ways in analyzing and understanding their incentives, situations, and behaviours (Goetz, Han, Hildabridle, Li, Tegegne, Tubene, and Wetherill; 2017). For example past studies have been focusing on the determinants of farm profits as it relates to net farm income such farm experience, skills, assets and the location (Han et al, 2017). But network analysis brings a new element of in that it comes with multidimensional
relationship with other farmers and everyone involved in the chain. Once farmers understand their position in their local network, it may produce additional insights into farmers’ economic wellbeing such as market access or sales and profits (Han et al., 2017). In addition, the agricultural space is a complex and a diverse environment, it consists of a number of institutions, social movements, NGO’s, private sector, small and commercial farmers. 

The review of literature in farmer’s network analysis in general provide a good platform to assess and understanding better the marketing arrangements of smallholder farmers or market access. Improved incomes in developed and developing countries have changed in what Kheller and Kirstin (2002) described as a new life style of consumers. They say consumers today are demanding too much in what is described as the new consumer a “highly demanding sort” Consumers want safe food, quality, consistency and value. This has forced producers to introduce new technology that will make it possible to ensure that agricultural and food products have the characteristics consumers want (Drabenstott, 1995; Boehlje, 2000). The technology in question includes biotechnology and information technology.

Kheller and Kirsten (2002) observed that other changes in food and agricultural markets include increasing competition from global participants, economies of size, scope in production and distribution, risk mitigation and management strategies of buyer and suppliers, strategic positioning and market power/control strategies of individual business. These changes have introduced different forms of integration (horizontal or vertical), networks, and alliances. In this context a new approach towards market access is necessary particularly for smallholder farmers (Ibid, 2002). It is important that smallholder farmers understand the economic agents engaging in transactions in the marketing chain. Kheller and Kirsten (2002) argue that it is often well resources and skilled smallholder farmers that able to participate in these marketing chains and alliances.

However, Kheller and Kirsten (2002) suggest that while it is often difficult for smallholder farmers to participate in high value markets because of stringent consumer and market demands there is a still role to play. Small farmers could be involved in product differentiation, organic products, niche markets or they can be linked with bigger players. It is against this background that the author feels the New Institutional Economics institutions could play when there is so much high transaction costs for smallholder farmers. Since institutions provide the incentive for efficient production and for people to engage in economic activity. Kirsten and Kheller (2002) states that an institution analysis is required to explain high transaction costs in developing countries. They argue that NIE is a useful
framework that could provide the types of institutions needed (formal or informal) to improve the economic performance in developing countries (Kirsten and Kheller; 2002).

It is against this background that this paper seek to understand the relationships within the local network of farmers to achieve required desired in this case market access hence the network approach. The FAO also employed SNA to provide a suitable framework to understand the multidimensional nature of food security and nutrition as well as the interplay of actors (FAO, 2018). It is argued that these approaches have been widely used in many fields including sociology, economics, information, technology, biology, etc.

2.1. Study area and data

This study was conducted at Goedverwacht Community (GWC) in Piketberg, located in the Western Cape Province of South Africa. Goedverwacht is situated off the R399 near Piketberg in West Coast district. According to World Online Weather (2018) the climate is mild, and generally warm and temperate. It experiences more rainfall in winter than in summer. The average rainfall is between 373 and 435mm per annum, with lowest rainfall being 4mm in February and highest being 70mm in June. Temperatures are at an average of 22 °C, January being the hottest month of the year and July being the lowest average temperature of the year at 11.5 °C.

Goedverwacht was established as a Moravian Mission station in 1889. The village originates from a cattle farm established in 1810, which was then bought by Moravian missionaries in 1889. The Moravian Church is an important actor in this farming community in which it is the land owner. This community is situated in a fertile and well-watered valley, where many fruits and vegetables are cultivated. Local people owned small back yard food plots and lease a small portion of the land from the church in the fields. They are involved in livestock and crop production. GWC pride itself by a festival, “Snoek & Patat Fees” held every year, at the end of June, as a throwback to the days when most of the community were subsistence farmers and had to barter their sweet potatoes for fish. The festival started in 2001. A new Jazz festival has been initiated in 2016 to raise a sustained income to local farmers and promote indigenous jazz sounds from the area.

Data were collected in 2017 at GWC. Qualitative data collection techniques that include focus group discussions, key informant interviews and personal interactions with farmers were employed during the data collection process. Farm level production and marketing data were also gathered through multiple farm visits and interactions with the farmers. Key informant interviews were also conducted to gather information about the involvement of farmers and traders in the network analysis process. Data collected include socio-economic
information, input procurement processes, price information, processing information, commodity transportation, storage and value adding activities.

3.1 Results and Discussion

The majority of farmers (60%) sold inside the community only, to other members of the community, 24% also sold to hawkers, while 40% of respondents sold both inside and outside the community. The low percentage (40%) of farmers selling outside may be explained by the lack of transport, infrastructure and the lack of information about market opportunities. Figure 1 maps the marketing networks within and outside Goedverwacht community.

*Figure 1: Marketing networks within and outside GWC*

The Goedverwacht farmers use mostly social networks within the community to sell their produce (Figure 1). Smallholder farmers are central in this network as they are the suppliers of produce to the two main actors, the cooperative and the tourism forum. They involve those who are part of the cooperative, those who are part of the tourism forum, farmers who supply the cooperative without being member and those who are not members of any organisation.
The two main entities, i.e. the cooperative\(^1\) and the tourism forum\(^2\) play a major role in the marketing of produce within and outside the community.

The cooperative and the tourism forum source produce from the local farmers and sell within and outside the community. The tourism has strong networks outside the community and they are well resourced compared to the cooperative. They process some of the produce to make sauces, jam, archer, and also sell as vegetables to Saturday markets, Checkin (retail shop in town) and to the local Pick n Pay in Town. While the cooperative have strong networks inside the community, they only attract hawkers outside the community to come and by their products. They have a small outlet just next to the road, the locals and tourists come and buy, while the tourism centre has a Coffey shop where they market their products.

These two entities act as marketing agents for the local farmers as they sell on behalf of the farmers in return for commission.

3.2. The input supply for GWC farmers

Inputs used by farmers in their production operations included seeds, pesticides, insecticides and fertilizers. Most farmers buy inputs at Piketberg or Wittewater, 8 km from Goedverwacht. The Department of Agriculture also supplies them with free inputs, they also buy from the local cooperative. Twenty-four percent of farmers indicated that they also used manure and homemade compost as inputs in the production of crops, which is not limited to smallholders farming as organic.

3.3. Sources of market information

When farmers were asked about the sources of market information, the majority (52%) indicated that they get market information from newspapers and surprisingly followed by farmers (36%) visiting stores in town to benchmark prices. Makeleni (2015) observed this similar behaviour where rural farmers in the Eastern Cape use the same packaging material from the retail shops to weigh their produce. Market and price information play a crucial role in production and marketing decisions of farmers. There is still a huge gap between farmers and the extension officers in terms of market information dissemination as only 12% of the farmers indicated that they receive market information from extension officers.

3.4. Farming Constraints for GWC farmers

\(^1\) The cooperative in this context refers to a certain grouping of farmers who used to be part of the local cooperative and were supported by government with infrastructure and implements but because of conflicts the group break away and they are now no longer a formal structure.

\(^2\) The tourism forum is the second grouping that broke away from the cooperative and formed a tourism centre for the community with lot of support from the private sector with an agri-processing unit. It is the same group that organize the snoek and Patat Festival.
The table below is explained by income groups. The first group is characterized by a farm income of less than R 1500 per month, the second group has an income between R 1500 and R3500 per month and the third group is characterized by a farm income of more than R 3500 per month.

<table>
<thead>
<tr>
<th>Income (R/month)</th>
<th>Pest and diseases</th>
<th>Equipment</th>
<th>Labour</th>
<th>Input access</th>
<th>Finance</th>
<th>Low productive land</th>
<th>Land tenure</th>
<th>Water</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>&lt; 1500</td>
<td>57,1</td>
<td>57,1</td>
<td>14,2</td>
<td>28,6</td>
<td>57,1</td>
<td>14,3</td>
<td>28,6</td>
<td>14,3</td>
</tr>
<tr>
<td>Group 2</td>
<td>1500 - 3500</td>
<td>25</td>
<td>16,7</td>
<td>16,7</td>
<td>8,3</td>
<td>75</td>
<td>8,3</td>
<td>41,7</td>
<td>25</td>
</tr>
<tr>
<td>Group 3</td>
<td>&gt; 3500</td>
<td>33,3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>83,3</td>
<td>16,7</td>
<td>33,3</td>
<td>33,3</td>
</tr>
</tbody>
</table>

*Table 1: Farming constraints faced by farmers from Goedverwacht community*

Table 1 present the main constraints faced by farmers’ groups. All groups indicated that finance is the main resource constraining agricultural activities in the community. Particularly the two lower groups (groups 2 and 3) with 75% and 83, 3% respectively.

Land tenure is also perceived as a constraint, mainly in group 2 (41, 7%). This may be explained by the possible willingness of smallholders to expand and increase production with the aim of selling products and upgrading to a commercial status. The church is the custodian of the land and, during the focus group meeting, access to valid lease agreements appeared as a real problem for smallholder farmers in this area, preventing them to get access to credit. This situation prevents farmers to invest in production and even government to support the farmers with grant funding. However, the population surveyed did not mention land tenure as a leading constraint. This can be explained by the fact that farmers have been farming for years on the same land and they now feel secure with these land. Regardless, land tenure remains a problem for farmers who require access to larger plots.

The main constraints faced by group 1 concern equipment and pest and diseases. This is surprising because most of them have been farming for years so they have a good experience in farming, they are used to manage agricultural production and problems such as pests and diseases. Furthermore, all of them practise crop rotation to minimise risks. However, because the majority gets most of its income from another source than agriculture, and most of them
farm on a subsistence basis, we could think they pay less attention to good farming practices such as pest and disease management. Then, pests and diseases build up and infest the crops, which also affects productivity and yields.

Markets appeared as a constraint for only 20% of the whole population surveyed, this seems to be constraining mainly for group 3, with 33, 3% of respondents declaring it as a constraint. It is not surprising as they indicated high transaction costs, lack of transport, storage being the main reasons which impede them to access better market but the majority of farmers are satisfied with informal channels as they do not have enough capacity for formal markets.

3.5. Crops produced at GWC and the Land sizes

Farmers cultivate vegetables and a little bit of citrus (lemon, naartjies and oranges). When farmers were asked about main crops grown in the area, about 84% of respondents indicated that they grow mostly beans, followed by sweet potatoes and cabbages (68%). Carrots, onions and peas were also cultivated by the majority of respondents (respectively 56%, 56% and 52%). The other crops grown in the area were sweet corn, butternut, potato, spinach, maize, green pepper, pumpkin, water melon, cucumber, green beans, tomato and sweet melon.

*Table 2: Land access*

<table>
<thead>
<tr>
<th>Income (R/month)</th>
<th>Land size (% of respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 0,5 ha</td>
</tr>
<tr>
<td><strong>Group 1</strong></td>
<td></td>
</tr>
<tr>
<td>&lt; 1500</td>
<td></td>
</tr>
<tr>
<td><strong>Group 2</strong></td>
<td></td>
</tr>
<tr>
<td>1500 - 3500</td>
<td></td>
</tr>
<tr>
<td><strong>Group 3</strong></td>
<td></td>
</tr>
<tr>
<td>&gt; 3500</td>
<td></td>
</tr>
</tbody>
</table>

In this community, the land is owned by the Moravian Church. There are two ways through which farmers can access the land. The first one is the traditional way through which every household had a garden and had to make certain payment arrangements. The second option to access land is to apply through the overseers council (Church). This is applicable in cases where households require access to larger plots for agricultural purposes is issued with a contract.
There is about 46% of farmers that utilize more than 1,5 hectares of land while 12,5% use less than 0,5 hectares of land.

Results in table 2 indicate that two-thirds of respondents belonging to the high income group access more than 1,5 hectares of land, 16,7% access between 1 and 1,5 ha and another 16,7% between 0,5 and 0,9 ha.

In as much as farmers at Goedverwacht access these small plots, during the survey it was mentioned that some land is under-utilised for different reasons. The main reasons mentioned were the lack of finance to develop the land.

3.6. Farming status

Taking a look at the farming status of the Goedverwacht Community, the income group of less R1500 per month, the majority are full time involved in farming despite that their main income is received through government 57%. This could be attributed by the fact that the majority of them have small plots and are mostly using their backyard vegetable plots.

The income group 2 receive 36.4% of their income through agriculture while 41.7% is participating full time in agriculture activities. It is also explained by the fact that 36.4% receive some of their income through wages which means that some are employed elsewhere.

Group 3 are all full time farmers, 83.3% of income is received through agriculture, and this group clearly invests all their time to farming. Judging from their main source of income it is quite clear that this group is market oriented. As Maponya et al (2014) say, employment status has an influence on the allocation of labour time, which can affect productivity.

Table 1: Farming status and main source of income

<table>
<thead>
<tr>
<th>Income (R/month)</th>
<th>Full time farming (%)</th>
<th>Main source of income (% of respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agriculture</td>
</tr>
<tr>
<td>Group 1</td>
<td>&lt; 1500</td>
<td>71,4</td>
</tr>
<tr>
<td>Group 2</td>
<td>1500 - 3500</td>
<td>41,7</td>
</tr>
<tr>
<td>Group 3</td>
<td>&gt; 3500</td>
<td>100</td>
</tr>
</tbody>
</table>
4. Concluding Remarks

The study has presented market network analysis explained by the social network analysis. Whilst production is not inhibited by the major inputs like water, land and fertilisers; market access, transport infrastructure and access to finance seems to be the major constraints on smallholder market networks. The study noted the reliance on informal markets and very low level of formal market participation. It has been realised that in the past there may have been too much focus on increasing production without sufficient attention to markets (Vermeulen, Woodhill, Proctor, & Delnoye, 2008). Similarly, a study conducted by Makhura, Kirsten, & Delgado, C. (2002) highlighted that smallholder maize farming in South Africa is characterised by low levels of market participation. It can therefore be argued that market stimulation for smallholder farmers can be regarded as a major intervention strategy production. It has also been noted that market readiness for smallholder farmers increases their capacity to participate in formal markets and also allows the exploitation market networks within and outside. Collective action must also be encouraged to strengthen farmers’ market position, enhancing market access in order to exploit networks inside and outside though economies of scale.

The implication of the study is that policy makers need to broaden their farmer support base from production orientation to include product market readiness. Where grants are allocated to projects or cooperatives for the purpose of boosting production a component of the funds should be allocated towards marketing of the produce. This will contribute towards upgrading market infrastructure and market linkages between farmers and the consumer. GWC farmers also constrained by small lands resulting to low output; hence farmer support towards increasing area under production can help increase volumes and an anticipated increase in the participation of formal markets.
References


